Prince Edward Island
Food Technology
Centre

PRINCE EDWARD ISLAND FOOD TECHNOLOGY CENTRE

1988 ANNUAL REPORT

Incorporated as
F.T.C. Enterprises Limited

CORPORATE MANDATE AND OBJECTIVES

MISSION STATEMENT

- To establish a Centre, develop expertise in food science and technology and apply this scientific capability for the benefit of the food industry of Prince Edward Island.

ROLE OF P.E.I. FOOD TECHNOLOGY CENTRE

- Improve technological capacity and competitiveness of P.E.I. agricultural and fisheries sectors in food processing capabilities.
- Provide a core of expertise focused on innovation, stimulation and development of existing and new processing technologies appropriate to P.E.I.
- Identify and execute specific projects to assist in optimizing and expanding the processing capacity of the agricultural and fisheries sectors.
- Develop and expand interactive capability of agricultural and fisheries sectors in P.E.I. with the food industry world-wide.

OBJECTIVES OF P.E.I. FOOD TECHNOLOGY CENTRE

- to initiate and execute pro-active research and development projects relating to food processing technologies.
- to assist in the improvement of existing processes and technologies utilized by the food industries of P.E.I. through creation of opportunities for the exploitation of state-of-the-art food technologies;
- to work with the available resources of the production industries to develop new opportunities and marketable products specific to P.E.I;
- to identify, transfer and integrate domestic and distant food processing technologies to the P.E.I. agricultural and fish processing sector;
- to develop food products and processing technologies which incorporate:

  a) value-added product opportunities,
  b) available, unexploited and underutilized sources of raw materials,
  c) by-products of agriculture, fish processing and aquaculture activities;

- to provide specific technical information and extension services to assist P.E.I. industry in innovation, development and improvement of food production and processing strategies;

EXECUTIVE DIRECTOR'S MESSAGE

The Prince Edward Island Food Technology Centre represents a new initiative activated in January, 1987 to attend the potential for value-added opportunities within the agricultural and fisheries sectors of the economy of Prince Edward Island. In light of the fact that these sectors account for about 12-15% of the total domestic product, it was recognized that expansion and technological development to accommodate rapidly changing markets in the food industry are required to maintain and improve the market position of Prince Edward Island in the years ahead.

The food industry and its development is of vital importance to the economy of Prince Edward Island. At the primary level, agriculture provides more than 6,000 person years of employment. In 1986, 3,154 farms in Prince Edward Island grossed almost $200 million; Fisheries involves more than 2,500 person years of employment and in 1986 grossed more than $67 million.

These figures are themselves impressive in a province with a total GDP of slightly more than one billion dollars. However, in consideration of the economic activity generated by food processing, the importance of the food industry to the provincial economy becomes even more apparent. Food processing firms make up approximately 70 per cent of the manufacturing portfolio in Prince Edward Island. At the same time, statistics indicate the food and beverage industry may be under-performing in terms of adding value to our primary products. In the five year period 1980-1984, the food and beverage industry accounted for only 55 percent of value-added in manufacturing activity for the province.

This statistical profile of the food industry in Prince Edward Island not only demonstrates its critical importance to the provincial economy, but suggests an even greater potential for adding value to Island food products. For example, despite Prince Edward Island's dominant presence in the potato industry, the bulk of our crop is shipped out of the province in its round, unprocessed form.

In a province where the high cost of transportation has been an historical barrier to economic development, it makes good business sense to seek ways to add value to products at the source of production. The same pattern of exporting raw product, (and thus exporting jobs and dollars) repeats itself in virtually every food product which the province produces.

In ideal circumstances, responsibility for research leading to new and innovative food products would be assumed by the private sector. However, in Prince Edward Island most firms involved in the food industry are small, family-owned enterprises with little capital or expertise to engage in research and development.

All levels of government in the province have recognized the potential and initiated public policy measures to capitalize on the province's abilities as a food producer.

The Provincial Government has adopted the development of the food industry in the province as an important policy objective. In each of the major areas of public policy, the primary focus of policy and programming is the food industry.

The government's industrial policy also recognizes the pivotal role that the food industry must play in the economic development of the province. In both its Science and Technology Strategy and its Industrial Prospecting Strategy, the provincial government directs policy effort toward the food industry.

Federal government policy is converging with the policy efforts of the provincial government to create a supportive network of programs designed to capitalize on the province's potential in the food industry. For example, Industry, Science and Technology Canada has been actively assisting existing companies to adopt and adapt technologies to improve production, quality and variety in the food processing sector.

It can now be stated that the original mission of the P.E.I. Food Technology Centre is well supported, both in terms of the local food processing industry and governmental policies, provincially and federally. It is felt that the opportunity for continued development of the Centre will occur in response to the needs of industry and the rapid development of food technology worldwide.

Richard F. Ablett, Ph.D.
Executive Director

F.T.C. SERVICES

During 1987/88 fiscal year, the Centre operated with a total staff of ten persons within an operating budget of $600,000. A range of activities were initiated including information services, extension responses, product and process developments in response to food industry requests, and a series of in-house research and development initiatives. Technical support services during this period were provided by the Department of Food Science and Technology at Technical University of Nova Scotia in Halifax.

The present location of the Centre, within temporary facilities on the campus of U.P.E.I., will be vacated following construction of a permanent facility during 1989. This Phase II development, which will include analytical and pilot plant facilities, is perceived as necessary to the execution of the mandate and objectives of the Centre.

Industry response to the Food Technology Centre has proven not only its feasibility, but also its desirability. In its first twelve months of operation as an office facility only, the Food Technology Centre staff, in consultation with private industry, has identified more than 70 projects.

Projects identified and undertaken by the Food Technology Centre, to date, can be summarized under one or more of the following general categories:

a) food products
b) food processes
c) technology transfers and integration
d) research and development
e) trouble-shooting
f) on-going operational services
g) establishment of new operations

a) Food Products

Assistance is provided to the client in the formulation and testing of new food products with special attention to quality, stability and appearance.

Examples of activities in this category include:

- ground dried fish from underutilized species
- a substitute pan preparation for the baking industry
- seafood chowders
- fruit-juice sweetened spread
- development of Russet Burbank chip

b) Food Processes

Assistance is provided to the client in the development and refinement of production procedures, the selection of appropriate technology and equipment, and the implementation of changes or improvements.

Examples of activities in this category include:

- drying of summer savory
- freeze-dried mussels
- cleaning of baby carrots
- hand-made potato chips

c) Technology transfer and integration

Projects in this category involve the identification and procurement of process technologies available from other regions, either in response to particular client need or the potential for technological advancement of the Island food processing sector. When required, the F.T.C. assists the processor with all aspects of the implementation of the new technology.

Examples of activities in this category include:

- dry-brusher technology for potatoes
- blueberry tissue culture
- chips from alternate potato varieties
- frozen mussel processing technology

d) Research and Development

Projects categorized under R&D generally involve longer term scientific evaluation and analysis of subjects which are perceived to have future (more generic) benefit to the Island food processing sector.

Examples of activities in this category include:

- processing of domoic acid contaminated mussels
- meal processing plant for agricultural & fisheries by-products
- MAP on fruit and vegetables
- vacuum packaged mussels
- hay wafering technology
- minor biochemical extractions from agricultural products and by-product

e) Trouble-shooting

Assistance is provided to the client in dealing with immediate processing difficulties encountered either in an established operation or during the implementation of a new product line or process.

Examples of activities in this category include:

- canning of meat
- shelf-life of dairy creamers

f) On-going Operational Services

The assistance provided under this category includes the provision of technical information and support, production support and training of staff.

Examples of activities in this category include:

- potato starch technology
- heat penetration in canning
- utilization of whey
- roasting chickens

g) Establishment of New Operations

Clients are provided the necessary technical support for the development of a new processing operation. Support would include provision of necessary technical input to business plans and funding applications.

INDUSTRIAL INTERACTION AND RESPONSE

The Food Technology Centre mandate is directed towards response to industrial clients at both catalytic and practical levels. Typically, after a client contacts the Centre with a development project, a concept, a technical question or an information request, a program is initiated to provide assistance and support.

With the specific project objectives defined and formalized through the Centre's personnel, and in some instances by inclusion of affiliate institutions, the project will be advanced and executed according to a mutually agreed workplan through a series of developmental phases using the resources available to the Centre.

The Centre assists the client in making application for any available funding from a federal , provincial, or other agency to support a project, thus minimizing out-of-pocket expense to the client.

DEVELOPMENT INITIATIVES

In as much as the P.E.I. Food Technology Centre was established to respond to existing and prospective industrial clients to enhance the provincial economy in terms of processing activities, the mandate also includes a major involvement in executing longer term applied research and development activities for the strategic benefit of the economy.

Through affiliation with the University of Prince Edward Island and the resources available from other academic and federal institutions throughout the Region, the Centre is actively developing its own initiatives to create industrial opportunities for the economy.

INFORMATION SERVICES

Information and Resource Centre

In order to fully service the Island food industry, the Food Technology Centre is developing an Information Service Group which will be involved in the acquisition and dissemination of research and technical information. Based within a small library setting, one Information Officer will collect, collate and disseminate appropriate materials of interest to the Island's developing food processing industries and its associated counterparts. This branch of the Food Technology Centre will interact directly with industry in addition to servicing the Food Technology Centre and its clients.

The activities of the information services may be split into four fairly distinct subdivisions:

Library	-	Control of library resources: books, journals, photographs, tapes, etc.
Intelligence	-	Gathering and dissemination of information for the Centre such as coming events, business research.
Public Relations	-	Publicizing the activities of the Centre through trade show displays, news releases and responding to enquiries.
Preparation of Audio-Visual Materials	-	Computer graphics, slides, video tapes and display material.

Brochure

An information brochure was developed in early 1988 for circulation to food processors and government sector personnel throughout the Atlantic Region.

Seminar Presentations

During the period February-April, 1988 a series of seminars was held for the benefit of the regional food processing industry. The seminars were conducted in affiliation with the Ontario Farm Machinery and Food Processing Centre and Holland College. The attendance and feedback for each seminar was acceptable and has provided the basis for a further series to be initiated once the Resource Division is established in the permanent facility.

PLANNING FOR NEW FACILITY

At year end negotiations with A.C.O.A. for a capital grant of $2,500,000 for construction of a new Food Technology Centre facility were progressing satisfactorily.

The building, of masonry construction, will cover approximately 3000 sq. ft., and the pilot plant will be 4800 sq. ft. The pilot plant will be capable of developing new products and producing sufficient marketable products to undertake test marketing of such products. The analytical labs, both micro biological and chemical, will be able to provide services to the Island food industries which are presently being conducted off-Island. The facility will permit the Centre to conduct many varied types of research and development involving all aspects of the food industry.

Construction is hoped to begin in the spring of 1989 with an estimated occupancy date of October, 1989.

AFFILIATIONS

UNIVERSITY OF PRINCE EDWARD ISLAND AND HOLLAND COLLEGE

The mandate of the Food Technology Centre is directed primarily to serve the needs and promote the development of the Island's food industry in areas of food processing, but also to serve a role to the generic benefit of P.E.I. in areas of strategic research and development in the agricultural and fisheries processing sector. In order to better serve these interests, the Centre has been negotiating a Memorandum of Understanding which will establish a formal affiliation with the University.

Affiliation with the University of Prince Edward Island will provide the Centre with access to scientific expertise and facilities in areas of biology, chemistry, physics, engineering and home economics. In particular, the recently established Atlantic Veterinary College on the campus of U.P.E.I. will provide a supportive physical and intellectual environment for a centre devoted to proactive research and development for the benefit of the Island's food industry.

The on-going development of a similar agreement with the Holland College Culinary Institute and the Holland College Technology Centre, including the Food and Fisheries Technology Programs, will contribute to the development of an essential "critical mass" from which the P.E.I. Food Technology Centre can grow to comprehensively serve the needs of the Island food sector.

ATLANTIC VETERINARY COLLEGE

The proximity of the Atlantic Veterinary College has proven to be valuable in the development of the Centre's integration with the Island's scientific community and in the delivery of services in response to industry. The Food Technology Centre has been able to access the comprehensive analytical capabilities of the College and it is perceived that continued interaction greatly reduces necessity for acquisition of very specialized pieces of laboratory equipment. On a number of projects the scientific and technical staff of the Atlantic Veterinary College have provided services to the Food Technology Centre in the areas of animal health and nutrition, proximate analysis, and animal feeding trials. It is expected that intensification of the level of interaction with the Atlantic Veterinary College is inevitable and will be mutually beneficial both in service to industry and the development of research portfolios.

TECHNICAL UNIVERSITY OF NOVA SCOTIA

Upon initial establishment of the P.E.I. Food Technology Centre, it was recognized that during Phase I of Centre development, close association with the Department of Food Science & Technology and the Canadian Institute of Fisheries Technology within T.U.N.S., would be necessary to provide a delivery mechanism on projects requiring laboratory and plant services. Accordingly, a specific portion of the Centre's resources have been allocated to ensure the maintenance of this working relationship. To date, the F.T.C. has engaged the services of the C.I.F.T. on approximately 15 projects. In addition, scientific consultation with both faculty and technical staff of the C.I.F.T. has proven invaluable over a broad spectrum of subjects ranging from product formulation and safety to laboratory design and development.

NATIONAL RESEARCH COUNCIL

The National Research Council has funded numerous projects for clients of the Food Technology Centre under its Industrial Research Assistance Program. The Centre has successfully negotiated ten IRAP-Ls on behalf of its clients and has received two IRAP'Ls of its own. The Centre has also been the recipient of two IRAP'Hs for the employment of a recently graduated engineer. During the 1987/88 fiscal year, N.R.C. funded the F.T.C. with a $25,000.00 grant to provide technical support to the food industry of P.E.I. and to become part of the IRAP country-wide network.

F.T.C. ENTERPRISES LIMITED

FINANCIAL STATEMENTS
FOR THE YEAR ENDED
MARCH 31, 1988

AUDITORS' REPORT TO THE SHAREHOLDERS

We have examined the balance sheet of F.T.C. Enterprises Limited as at March 31, 1988 and the statements of income and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at March 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Coopers & Lybrand

CHARTERED ACCOUNTANTS

BALANCE SHEET AS AT MARCH 31, 1988

ASSETS

CURRENT ASSETS		
Cash	155,339	
Accounts receivable	15,908	171,247
FIXED ASSETS (note 3)		41,988
		$213,235

LIABILITIES

CURRENT LIABILITY		
Accounts payable and accrued liabilities		47,350

SHAREHOLDERS' EQUITY

CAPITAL STOCK (note 4)	100	
CONTRIBUTED SURPLUS	165,785	165,885
		$213,235

SIGNED ON BEHALF OF THE BOARD

Director

Director

STATEMENT OF INCOME
FOR THE YEAR ENDED MARCH 31, 1988

REVENUE		
Grant from the Province of Prince Edward Island (note 6)	445,037	
Project recoveries	36,509	
Other	13,623	495,169
EXPENSES		
Salaries and benefits	263,517	
Project costs	62,479	
Office and field supplies	17,647	
Telecommunications	15,771	
Rent and occupancy costs	14,597	
General administration	4,105	
Printing	20,173	
Advertising and promotion	6,695	
Publications	10,323	
Professional fees	14,205	
Travel and training	50,053	
Depreciation	15,604	495,169
EXCESS REVENUE FOR THE YEAR		$ -

STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE YEAR ENDED MARCH 31, 1988

OPERATING ACTIVITIES		
Excess revenue for the year	-	
Item not affecting cash -		
Depreciation	15,604	
	15,604	
Net decrease in non-cash working capital balances related to operations	31,442	47,046
INVESTING ACTIVITY		
Purchase of fixed assets		(57,592)
FINANCING ACTIVITIES		
Issuance of capital stock	100	
Contributed surplus	165,785	165,885
NET CASH - END OF YEAR		$155,339

NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 1988

1. ACCOUNTING POLICIES

The financial statements of the company have been prepared in accordance with generally accounting principles. The following is a summary of significant accounting policies used in the preparation of these financial statements.

Depreciation

Depreciation of fixed assets is calculated using the straight-line method at the annual rate of 33-1/3% for computer and 20% for furniture. A full year's depreciation is taken in the year of acquisition.

2. INCORPORATION

The company commenced active operations on April 1, 1987 and was incorporated on August 21, 1987 under the laws of the Province of Prince Edward Island. The financial statements include the assets, liabilities and results of operations from commencement of operations on April 1, 1987.

3. FIXED ASSETS

	Cost	Accumulated depreciation	Net
Computer	29,300	9,766	19,534
Furniture	28,292	5,838	22,454
	57,592	15,604	41,988

4. CAPITAL STOCK

Authorized, issued and fully paid -	
100 common shares of the par value of $1 each	$100

During the year, the company issued 100 common shares for cash of $100.

5. CORPORATE STATUS

The company is a wholly-owned subsidiary of a crown corporation, the Prince Edward Island Development Agency.

6. GRANTS FROM THE PROVINCE OF PRINCE EDWARD ISLAND

Operating	445,037
Contributed surplus	155,063
	$600,100

BUSINESSES ASSISTED

A.P.S. Limited
Acadian-Evangeline Group Co-op
Ag-Vest Inc.
Albany Group, The
Arsenault, Denise
Atlantic Fish Specialities Ltd.
Boyd, Susan
Buell, Joseph
Business Training Centre
Cavendish Farms
Community Futures
Duffy, Bill
Eric C. Robinson Inc.
Fraser, David
Gallant, Paul
Garden Province Meat (1985) Inc.
Gilbert, Ronald
Hardy's Snacks
Hellross Products Ltd.
Integrated Aquatic Systems Ltd.
Island Milling and Baking
Island Saltfish Inc.
Johnston's Homestyle Products Ltd.
Keenan Farms (PEI) Ltd.
Keith, Greg
Little Cristo's Pizzeria
MacDonald, Andy
MacKenzie, David
MacPherson, Gordon
Magic Meadows Farm
Mid-Isle Farms
Miramar Industries
Montgomery, Doris
Mt. Vernon Farms
North Shore Packing Company Limited
Ocean Bounty Sea Products Ltd.
P.E.I. Hay & Straw Co-op
P.E.I. Preserve Co.
Palmer, Robert
Perfection Foods Limited
Pinsent, Morley
Pioneer Fisheries
Polar Seafoods Ltd.
Sandler, Stan
Seatreat Restaurant
Simmonds, Percy
Souris Buttercup Dairy Ltd.
St. Peter's Bay Mussel Farm Inc.
Summer's Bounty Ltd.
Summerside Sea Products Ltd.
Vandenbremt, Agnes
Weeks, Marg
Westech Agriculture Ltd.

ASSOCIATIONS AND GOVERNMENT AGENCIES ASSISTED

Canadian Mental Health Assoc.
Dept. of Industry
Health and Social Services
P.E.I. Dept. of Agriculture
P.E.I. Fisherman's Association
P.E.I. Hog Marketing Board
P.E.I. Horticultural Association
Premier's Office

CORPORATE DIRECTORY

BOARD OF DIRECTORS

George Wright, Sherwood
Chairman

M.S. Kelly, Sherwood
Deputy Minister of Industry and
C.E.O. of P.E.I. Development Agency

Andrew Wells, Hunter River
Secretary to Treasury Board

Dale Dewar, New Perth
Deputy Minister of Agriculture

Keith Wornell, Charlottetown
Secretary to Policy Board

Doug Johnston, Brudenell
Deputy Minister of Fisheries

Richard F. Ablett, Hazel Grove (ex-officio)
Executive Director of P.E.I. Food Technology Centre

J. Reagh Hicken, Southport (ex-officio)
Controller of P.E.I. Development Agency

OFFICERS

Chairman of the Board, George D. Wright
Vice Chairman/Treasurer, Michael S. Kelly
Secretary/Executive Director, Richard F. Ablett
Controller, Brenda Tremere
Project Coordinator, Colin R. Marr

AUDITORS

Coopers & Lybrand

BANKER

Bank of Montreal

SOLICITORS

Scales, Jenkins & McQuaid